

PATENT

I hereby certify that on the date specified below, this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

October 20, 2003 Dan Parker
Date

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Michael W. Reed, Eugene A. Lukhtanov, Alexander A. Gall,
Robert O. Dempcy, Nicolaas M. J. Vermeulen and Yevgeniy S.
Belousov
Application No. : 09/876,830
Filed : March 21, 2002
For : FLUORESCENT QUENCHING DETECTION REAGENTS AND
METHODS

Examiner : Jezia Riley
Art Unit : 1637
Docket No. : 290097.405

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.131

Commissioner:

I, Eugene Lukhtanov, hereby declare as follows:

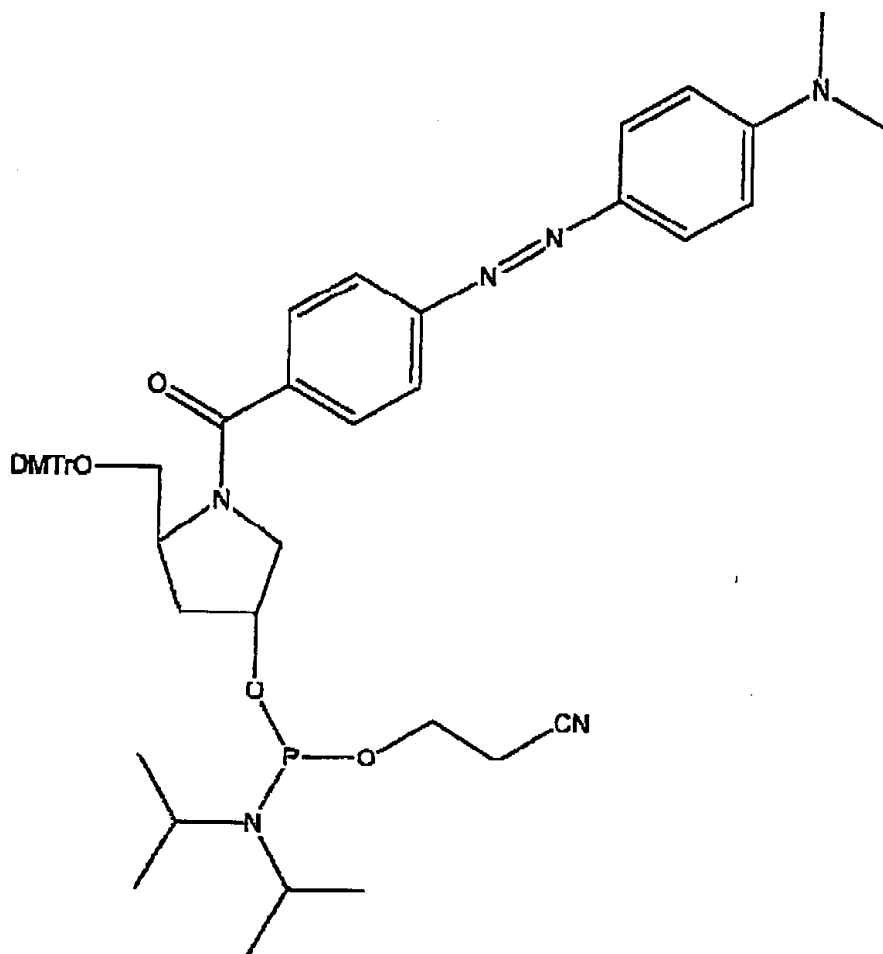
1. I am co-inventor with Michael W. Reed, Alexander A. Gall, Robert O. Dempcy, Nicolaas M. J. Vermeulen and Yevgeniy S. Belousov of the above-identified patent application (hereinafter referred to as "subject application").

2. All of the work described within this Declaration was performed in the United States, by me or on my behalf and under my direction.

3. I have reviewed my laboratory records, including the Exhibit submitted herewith, and readily conclude that a compound as claimed in the subject application was conceived prior to September 30, 1999. Furthermore, due diligence was exercised from this time period until the invention was either actually reduced to practice, or until the filing of the subject application.

4. The Exhibit annexed hereto is a photocopy of a laboratory notebook page kept in the regular course of business at Epoch Biosciences, Inc. All dates have been removed from the annexed photocopy, and it is my understanding based on discussion with applicants' representatives that this is a permissible Patent Office practice. Otherwise, the Exhibit is a true copy of a page from my laboratory notebook record. The actual notebook page is dated prior to September 30, 1999.

5. The Exhibit discloses the preparation of a compound of the following formula



6. Evidence for the formation of the indicated structure is provided in the notebook record annexed hereto, in the form of thin layer chromatography and absorption spectra.

7. In summary, upon review of my laboratory records, I have concluded that, at least prior to September 30, 1999, a compound as described and claimed within the subject application had been conceived. Furthermore, conception of the invention led to further research, resulting in an actual reduction to practice or in the filing of the subject application.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated this 20th day of October, 2003

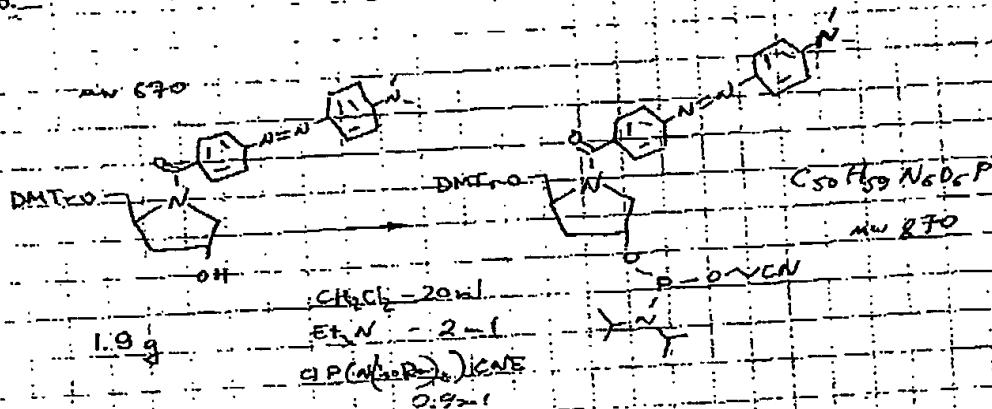
Eugene Lukhtanov
Eugene Lukhtanov

Enclosure:
Exhibit

Project No. _____
Book No. 589 TITLE _____

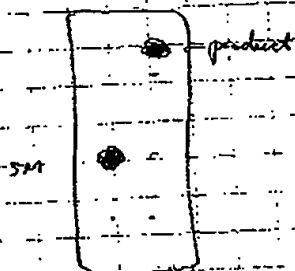
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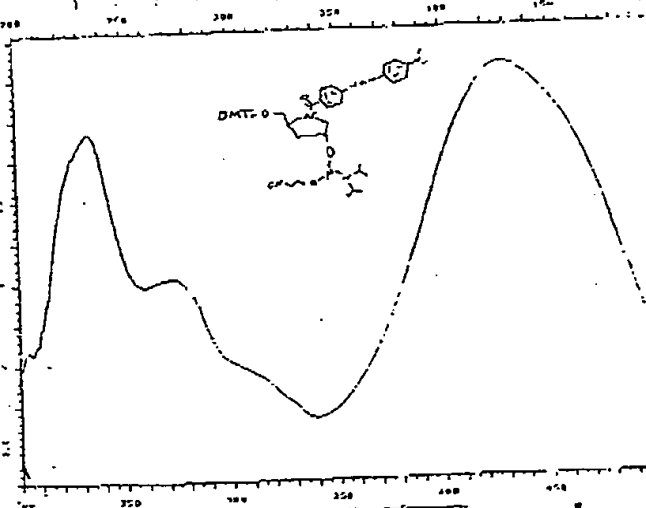
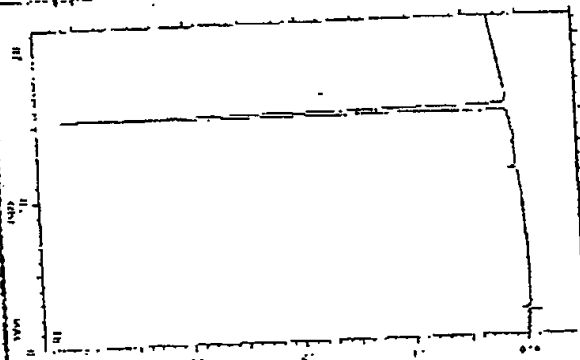
To a solution of 5P3-103 (1.9g) in 20 ml of dry CH_2Cl_2 and 2 ml of Et_3N was added $\text{SiP}(\text{N}(\text{iPr})_2)_3\text{NE}$ (0.9 ml). The reaction was kept $\sim 50^\circ\text{C}$ for 4 h at RT. CH_2Cl_2 was removed, H_2O (0.4 ml) was added and the solution was extracted with CH_2Cl_2 . The residue was chromatographed on silica.

was in H_2O (0.4 ml) was added and the mixture concentrated. The residue was chromatographed on silica (pre-washed with Et_2O) and then with 50% EtOAc (hexane) eluting with EtOAc -hexane (2:1). Concentration of the pure product fractions and drying under vacuum afforded 2.3 g of the desired phosphoramidite as an orange, amorphous solid.



Find A...

The plate was washed with EtOH and dried prior to non labeling and run



Witnessed & Understood by me,

Date _____

Invented by

Date

Recorded by

№ Лукhtанор